Under the P	aperwork Reduction	on Act of 1995,	no persons are required to respond to a collec-	ction of information unless it contains a valid OMB	control number		
	er the Paperwork Reduction Act of 1995, no persons are required to respond to a Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	APTO	Complete if Known				
	** **	ATEME	NT BY APPLICANT	Application Number	08/765,108		
		•	•	Filing Date	March 27, 1997		
]				First Named Inventor	Monty Krieger		
1				Group Art Unit	1646		
				Examiner Name	Who, John B. BRANNOCK		
Sheet	1	of	13	Attorney Docket Number	MIT 6620 CIP		

				U.S. PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1		US Patent Docu	ment	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
			Code ² known)				
M		3,625,214		Higuchi	12-07-1971		
		4,244,946		Rivier, et al.	01-13-1981		
		4,305,872		Johnston, et al.	12-15-1981		
		4,316,891		Guillemin, et al.	02-23-1982		
V		4,629,784		Stammer	12-16-1986		
		4,709,734		Pierschbacher	12-00-1988	DUPLICATE (DUP.)	
m		4,792,525		Ruoslahti, et al.	12-20-1988		
7		4,868,116		Morgan, et al.	09-19-1989		
		4,906,474		Langer, et al.	03-06-1990		
		4,925,673		Steiner, et al.	05-15-1990		
V		4,980,286		Morgan, et al.	12-25-1990		
_	ļ		-				
	1					•	

				F	OREIGN PATENT DOCUMEN	ITS		
Examiner Initials*	Cite No. ¹		Foreign Patent Docu	nent	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τ ⁶
		Office.3	Number ⁴	Kind Code ⁵ (if known)			· · ·	
		WO .	90/05748		Mass. Inst. Tech.	05-31-1990		
		wo -	93/01280	 	Mass. Inst. Tech.	01-21-1993	= ~\\	
		JP .	05-102170		Chugai Pharm. Co.	08-03-1993	<u> </u>	
		JP	03-290184		Chugai Pharm. Co	12-19-1991	- OURLAND	
		 		1			(10)	

Examine Signature	Maine	Date Considered 62/15/	04

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Assistant Commission for Patent, Washington, DC 20231.

+

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449A/PTO Complete if Known 08/765,108 INFORMATION DISCLOSURE Application Number STATEMENT BY APPLICANT (use as many sheets as necessary) March 27, 1997 Filing Date First Named Inventor Monty Krieger **Group Art Unit** 1646 **Examiner Name** Ulm, John D. 13 Attorney Docket Number MIT 6620 CIP Sheet of

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
ny		ABRAMS, et al., "Macrophages in <i>Drosophila</i> embryos and L2 cells exhibit scavenger receptor-mediated endocytosis," <i>Proc. Natl. Acad. USA</i> 89:10375-10379 (1993).	
		ABUMRAD, et al., "Cloning of a Rat Adipocyte Membrane Protein Implicated in Binding or Transport of Long-chain Fatty Acids That is Induced during Preadipocyte Differentiation," <i>J. Biol. Chem.</i> 268:17665-17668 (1993).	
		ACTON, et al., "Expression Cloning of SR-BI, a CD36-related Class B Scavenger Receptor," J. Biol. Chem. 269(33):21003-21009 (1994).	
	••	ACTON, et al., "The Collagenous Domains of Macrophage Scavenger Receptors and Complement Component C1g Mediate Their Similar, But Not Identical, Binding Specificities for Polyanionic Ligands," <i>J. Biol. Chem.</i> 268:3530-3537 (1993).	
		AGRAWAL, et al., "Oligodeoxynucleoside phosphoramidates and phosphorothioates as inhibitors of human immunodeficiency virus," <i>Proc. Natl. Acad. Sci. USA</i> 85:7079-7083 (1988).	
		ARAI, et al., "Multiple Receptors for Modified Low Density Lipoproteins in Mouse Peritoneal Macrophages: Different Uptake Mechanisms for Acetylated and Oxidized Low Density Lipoproteins," <i>Biochem. Biophys. Res. Commun.</i> 159:1375-1382 (1989).	
	•	ARUFFO, et al., "Molecular cloning of a CD28 cDNA by a high-efficiency COS cell expression system," <i>Immunology</i> 84:8573-8577 (1987).	
		ASCH, et al., "Isolation of the Thrombospondim Membrane Receptor," <i>J. Clin. Invest</i> . 79:1054-1061 (1987).	
		ASHKENAS, et al., "Structures and high and low affinity ligand binding properties of murine type I and type II macrophage scavenger receptors," <i>J. Lipid Res.</i> 34:983-1000 (1993).	
		ASKEW, et al., "Molecular Recognition with Convergent Functional Groups, Synthetic and Structural Studies with a Model Receptor for Nucleic Acid Components," <i>J. Am. Chem. Soc.</i> 111:1082-1090 (1989).	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Examiner's

Signature

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

3

Sheet

type a plus sign (+) inside this box →	1

Substitute for form 1449A/PTO	Comple	ete if Known
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	08/765,108

Attorney Docket Number

sons are required to respond to a collection of information unless it contains a valid OMB control number

(use as many sheets as necessary)

13

of

Filing Date March 27, 1997 First Named Inventor Monty Krieger **Group Art Unit** 1646 Examiner Name Ulm, John D.

MIT 6620 CIP

		OTHER ART NON PATENT LITERATURE DOCUMENTS
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
W		BALDINI, et al., "Cloning of a Rab3 isotype predominately expressed in adipocytes," Proc. Natl. Acad. Sci. USA 89:5049-5052 (1992).
\	_	BASU, et al., "Independent Pathways for Secretion of Cholesterol and Apolipoprotein E by Macrophages," Science 219:871-873 (1983).
		BICKEL, et al., "Rabbit Aortic Smooth Muscle Cells Express Inducible Macrophage Scavenger Receptor Messenger RNA That is Absent from Endothelial Cells," <i>J. Clin. Invest.</i> 90:1450-1457 (1992).
		BLUME, et al., "Triple helix by purine-rich oligonucleotides targeted to the human dihydrofolate reductase promoter," Nucl. Acids Res. 20:1777-1784 (1992).
		BROWN, et al., "Lipoprotein Metabolism in the Macrophage: Implications for Cholesterol Deposition in Atherosclerosis," <i>Annu. Rev. Biochem.</i> 52:223-261 (1983).
		CALVO, et al., "Identification, Primary Structure, and Distribution of CLA-1, a Novel Member of the CD36/LIMPHII Gene Family," <i>J. Biol. Chem.</i> 268 (25):18929-18935 (1993).
		CHARRON, et al., "A glucose transport protein expressed predominately in insulin-responsive tissues," <i>Proc. Natl. Acad. Sci. USA</i> 86:2535-2539 (1989).
		CHEN, et al., "NPXY, a Sequence Often Found in Chyoplasmic Tails, is Required for Coated Pit-mediated Internalization of the Low Density Lipoprotein Receptor," <i>J. Biol. Chem.</i> 265:3116-3123 (1990).
		CLACKSON, T., et al., "Making antibody fragments using phage display libraries," Nature 352:624-688 (1991).
$\sqrt{}$		COONEY, et al., "Site-Specific Oligonucleotide Binding Represses Transcription of the Human <i>c-myc</i> Gene In Vitro," <i>Science</i> 241, 456-459 (1988).
~	i	4

						/	
Examiner's Signature	Ma	Men	Date Considered	ス	115/	24	
			-:				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	1
-----------------------------------------------	---

PTO/SB/08A (10-96 Approved for use through 10/31/99, OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

	Substitute for	form 1449.	A/PTO	Complete if Known			
	STATE	MENT	N DISCLOSURE BY APPLICANT heets as necessary)	Application Number	08/765,108		
	(,,	Filing Date	March 27, 1997		
				First Named Inventor	Monty Krieger		
				Group Art Unit	1646		
				Examiner Name	Ulm. John B. BRANNOCK		
heet	4	of	13	Attorney Docket Number	MIT 6620 CIP		

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
My		CROOKE, "Progress toward oligonucleotide therapeutics: pharmacodynamic properties," FASEB J. 7:533-539 (1993).	
		CULLEN, "Use of Eukaryotic Expression Technology in the Functional Analysis of Cloned Genes," <i>Methods in Enz.</i> 152:684-704 (1987).	
V		DAUGHERTY, et al., "Polymerase chain reaction facilitates the cloning, CDR-grafting and rapid expression of a murine monoclonal antibody directed against the CD18 component of leukocyte integrins," Nucl. Acids Res. 19:2471-2476 (1991).	
		DE RIJKE, et al., "Binding characteristics of scavenger receptors on liver endothelial and Kupffer cells for modified low-density lipoproteins," <i>Biochem. J.</i> 304:69-73 (1994).	
M		DOI, et al., "Charged Collagen Structure Mediates the Recognition of Negativity Charged Macromolecules by Macrophage Scavenger Receptors," J. Biol. Chem. 268:2126-2133 (1993).	
		DUVAL-VALENTIN, et al., "Specific inhibition of transcription by triple helix-forming oligonucleotides," <i>Proc. Natl. Acad. Sci. USA</i> 89:504-508 (1992).	
		ELLINGTON, et al., "Selection in vitro of single-stranded DNA molecules that fold into specific ligand-binding structures," Nature 355:850-852 (1992).	
		ENDEMANN, et al., "CD36 is a Receptor for Oxidized Low Density Lipoprotein," J. Biol. Chem. 268:11811-11816 (1993).	
		FAUST, et al., "Expression of Specific High Capacity Meyalonate Transport in a Chinese Hamster Ovary Cell Variant," J. Biol. Chem. 262:1996-2004 (1987).	
		FRASER, et al., "Divalent cation-independent macrophage adhesion inhibited by monoclonal antibody to murine scavenger receptor," <i>Nature</i> 364:343-346 (1993).	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

1

Examiner's Signature

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please typ	e a plus sign	(+) inside this box \rightarrow	[
------------	---------------	-----------------------------------	---

	PT	O/SB/08A	(10-96
Approved for use through	10/31/99.	OMB 065	1-0031
Patent and Trademark Office: U.S. DEPA	RTMENT	OF COMM	ERCE

Onder the F	Substitute for			a collection of information unless it contains a valid OMB control number Complete if Known			
	STATE	MENT	N DISCLOSURE BY APPLICANT heets as necessary)	Application Number	08/765,108		
	`	•	••	Filing Date	March 27, 1997		
				First Named Inventor	Monty Krieger		
				Group Art Unit	1646		
İ				Examiner Name	Ulm, John D. BRANNOCK		
Sheet	5	of	13	Attorney Docket Number	MIT 6620 CIP		

Examiner's Initials*	Cite	OTHER ART – NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	
	No.1	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
M		FREEMAN, et al., "Expression of type I and type II bovine scavenger receptors in Chinese hamster ovary cells: Lipid droplet accumulation and nonreciprocal cross competition by acetylated and oxidized low density lipoprotein," <i>Proc. Natl. Acad. Sci. USA</i> 88:4931-4935 (1991).	
		FUKASAWA, et al., "Chinese Hameter Ovary Cells Expressing a Novel Type of Acetylated Low Density Lipoprotein Receptor," <i>J. of Biol. Chem.</i> 270(4):1921-1927 (1995).—	-
Vie		GOLDSTEIN, et al., "Binding site on macrophages that mediates uptake and degradation of acetylated low density lipoprotein, producing massive cholesterol deposition," <i>Proc. Natl. Acad. Sci. USA</i> 76:333-337 (1979).	
		GOLDSTEIN, et al., "Receptor-Mediated Endocytosis of Low-Density Lipoprotein in Cultured Cells," <i>Methods Enzymol.</i> 98:241-260 (1993).	
		GREENWALT, et al., "Membrane Glycoprotein CD36: A Review of Its Roles in Adherence, Signal Transduction, and Transfusion Medicine," <i>Blood</i> 80:1105-1115 (1992).	
		GREGORIADIS, G., Chapter 14. "Liposomes", <u>Drug Carriers in Biology and Medicine</u> pp. 287-341 (Academic Press, 1979).	
		GRIGORIEV, et al., "A Triple Helix-forming Oligonucleotide-Intercalator Conjugate Acts as a Transcriptional Repressor via inhibition of NF _k B Binding of Interleukin-2 Receptor α-Regulatory Sequence," <i>J. Biol. Chem.</i> 267:3389-3395 (1992).	
		HABERLAND, et al., "Role of the Maleyl-Albumin Receptor in Activation of Murine Peritoneal Macrophages In Vitro," <i>J. Immunol.</i> 142:855-862 (1989).	
		HABERLAND, et al., "Two Distinct Receptors Account for Recognition of Maleyl-Albumin in Human Monocytes during Differentiation In Vitro," <i>J. Clin. Inves.</i> 77:681-689 (1986).	
1	-	HART, et al., "A <i>Drosophila</i> Gene Encoding an Epithelial Membrane Protein with Homology to CD36/LIMP II," <i>J. Mol. Biol.</i> 234:249-253 (1993).	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Dup.

0

Examiner's Signature

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

type a plus sign (+) inside this box →	+

	Substitute for	form 1449/	VPTO	Complete if Known			
	STATE	EMENT	N DISCLOSURE BY APPLICANT neets as necessary)	Application Number	08/765,108		
1	•	•	• •	Filing Date	March 27, 1997		
1				First Named Inventor	Monty Krieger		
				Group Art Unit	1646		
				Examiner Name	Ulm, John B. BRWVOCK		
Sheet	6	of	13	Attorney Docket Number	MIT 6620 CIP		

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
m		HERZ, et al., "Surface location and high affinity for calcium of a 500-kd liver membrane protein closely related to the LDL-receptor suggest a physiological role as lipoprotein receptor," EMBO J. 7:4119-4127 (1988).	
		HOLT, et al., "An Oligomer Complementary to c-myc mRNA Inhibits Proliferation of HL-60 Promyelocytic Cells and Induces Differentiation," Mol. Cell. Biol. 8:963-973 (1988).	
		HORIUCHI, et al., "Scavenger Function of Sinusoidal Liver Cells: Acetylated Low-density Lipoprotein is Endocytosed via a Route Distinct from Formaldehyde-treated Serum Albumin," <i>J. Biol. Chem.</i> 259:53-56 (1985).	
		HUANG, et al., "Membrane glycoprotein IV (CD36) is physically associated with the Fyn, Lyn, and Yes protein-tyrosine kinases in human platelets," <i>Proc Natl. Acad. Sci. USA</i> 88(17):7844-7848 (1991).	
		HUNT, et al., "Chacterization and sequence of a mouse hsp70 gene and its expression in mouse cell lines," Gene 87:199-204 (1990).	
		INABA, et al., "Macrophage Colony-stimulating Factor Regulates Both Activities of Neural and Acidic Cholesteryl Ester Hydrolases in Human Monocyte-derived Macrophages," <i>J. Clin. Invest.</i> 92(2):750-757 (1993).	
		ITAKURA, et al., "Synthesis and use of synthetic oligonucleotides," Ann. Rev. Biochem. 53:323-356 (1984).	
		KABAT, et al., Sequences of Proteins of Immunological Interest, 4th Ed. (U.S. Dept. Health and Human Services, Bethesda, MD, 1987).	
		KINGSLEY, et al., "DNA-Mediated Transfer of a Human Gene Required for Low-Density Lipoprotein Receptor Expression and for Multiple Golgi Processing Pathways," Mol. Cell. Biol. 6:2734-2737 (1986).	
1	-	KINGSLEY, et al., "Receptor-mediated endocytosis of low density lipoprotein: Somatic cell mutants define multiple genes required for express of surface-receptor activity," <i>Proc. Natl. Acad. Sci. USA</i> 81:5454-5458 (1984).	<u></u>

		·	
Examiner's Signature	Monne	Date Considered	2/15/04

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

8808A	(10-96
MB 065	1-0031

Under the Pa	perwork Reduction	Act of 1995, r	o persons are required to respond to	a collection of information unless it contains a vali	d OMB control number
	Substitute for t				mplete if Known
	STATE	MENT	N DISCLOSURE BY APPLICANT heets as necessary)	Application Number	08/765,108
Į.			•,	Filing Date	March 27, 1997
				First Named Inventor	Monty Krieger
				Group Art Unit	1646
				Examiner Name	Ulm, John D. BNAWNCL. To
Sheet	7	of	13	Attorney Docket Number	MIT 6620 CIP

Evaminara	Cito	OTHER ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	T²
Examiner's Initials*	Cite No. ¹	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
		KOBZIK, "Lung Macrophage Uptake of Unopsonized Environmental Particles," J. of Immunol. 155(1):367-376 (1995).	
m		KODAMA, et al., "Type I macrophage scavenger receptor contains α-helical and collagen-like coiled coils," <i>Nature</i> 343:531-535 (1990).	
Wy		KRIEGER, "Contemplation of Mutations in the LDL Pathway of Receptor-Mediated Endocytosis by Cocultivation of LDL Receptor-Defective Hamster Cell Mutants," Cell 33:413-422 (1983).	
/_		KRIEGER, "Molecular Flypaper and atherosclerosis: structure of the macrophage scavenger receptor," Trends Biochem, Sci. 17:141-146 (1992).	
		KRIEGER, "Molecular Flypaper, Host Defense, and Atherosclerosis," J. Biol. Chem. 268(7):4569-4572 (1993)."	
My		KRIEGER, "Reconstitution of the Hydrophobic Core of Low-Density Lipoprotein," Meth. Enzymol. 128:608-613 (1986).	
1		KRIEGER, et al., "Amphotericin B selection of mutant Chinese hamster cells with defects in the receptor-mediated endocytosis of low density lipoprotein and cholesterol biosynthesis," <i>Proc. Natl. Acad. Sci. USA</i> 80:5607-5611 (1983).	
		KRIEGER, et al., "Isolation of Chinese Hamster Cell Mutants Defective in the Receptor-mediated Endocytosis of Low Density Lipoprotein," <i>J. Mol. Biol.</i> 150:167-184 (1981).	
		KRIEGER, et al., "Reconstituted Low Density Lipoprotein," J. Supra. Struct. 10:467-478 (1979).	
1		KRIEGER, et al., "Structures and Functions of Multiligand Lipoprotein Receptors: Macrophage Scavenger Receptors and LDL Receptor-Related Protein (LRP)," J. Annu. Rev. Biochem. 63:601-637 (1994).	

				<u> </u>	
Examiner's Signature	Mann	Date Considered	15/	04	· _
			,		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO			PTO	Complete if Known		
	STATE	MENT E	DISCLOSURE BY APPLICANT ets as necessary)	Application Number	08/765,108	
	(555)		,,	Filing Date	March 27, 1997	
			•	First Named Inventor	Monty Krieger	
				Group Art Unit	1646	
			•	Examiner Name	Ulm, John D. BNANO CI	
T	8	of	13	Attorney Docket Number	MIT 6620 CIP	

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
M		KRIEGER, et al., Cold Spring Harbor Symposia on Quantitative Biology Vol. LVII, 605-609 (1992).	
1		LEWIS, et al., "Automated site-directed drug design: the concept of spacer skeletons for primary structure generation," <i>Proc. R. Soc. Lond.</i> 236, 125-140 and 141-162 (1989).	
1		LOWRY, et al. "Protein Measurement with the Folin Phenol Reagent," J. Biol. Chem. 193:265-275 (1951).	
		LUOMA, et al., "Expression of α ₂ -Macroglobuli Receptor/Low-Density Lipoprotein Receptor related Protein and Scavenger Receptor in Human Atherosclerotic Lesions," <i>J. Clin. Inv.</i> 93(5):2014-2021 (1994).	
m		MAHER, et al., "Inhibition of DNA Binding Proteins by Oligonucleotide-Directed Triple Helix Formation," Science 245:725-730 (1989).	
		MATSUMOTO, et al., "Human macrophage scavenger receptors: Primary structure expression, and localization in atherosclerotic lesions," <i>Proc. Natl. Acad. Sci. USA</i> 87:9133-9137 (1990).	-
		McKINALY, et al., "Rational design of antiviral agents," Annu. Rev. Pharmacol. Toxiciol. 29:111-122 (1989).	
		MERRIFIELD, "Solid Phase Peptide Synthesis I. The Synthesis of a Tetrapeptide," J. Am. Chem. Soc. 85:2149-2154 (1964).	
		MOESTRUP, et al., Distribution of the α ₂ -macroglobulin receptor/low density lipoprotein receptor-related protein in human tissues," Cell Tissue Res. 269:375-382 (1992).	,
		MULLIGAN, "The Basic Science of Gene Therapy," Science 260:926-932 (1993).	-

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

DVP

Examiner's

Signature

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁹ Applicant to place a check mark here if English language Translation is attached.

Please type a plus	sign (+) inside this box →
--------------------	----------------------------

	PT	O/SB/C	A8	(10-96
Approved for use through 10/31	/9 9.	OMB	065	1-0031
stent and Trademark Office: U.S. DEPARTME	ENT	OF CC	MMC	ERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to Substitute for form 1449A/PTO	Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Application Number	08/765,108		
	Filing Date	March 27, 1997		
	First Named Inventor	Monty Krieger		
	Group Art Unit	1646		
	Examiner Name	Blm, John D. BICKNOCK		
Sheet 9 of 13	Attorney Docket Number	MIT 6620 CIP		

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
M		NAGELKERKE, et al., "In Vivo and in Vitro Uptake and Degradation of Acetylated Low Density Lipoprotein by Rat Liver Endothelial, Kupffer, and Parenchymal Cells," <i>J. Biol. Chem.</i> 258:12221-12227 (1983).	
		NAITO, et al., "Tissue Distribution Intracellular Localization, and In Vitro Expression of Bovine Macrophage Scavenger Receptors," Am. J. Pathol. 139:1411-1423 (1991).	
		NARANG, et al., in "Chemical Synthesis of Deoxyoligonucleotides by the Modified Triester Method," <i>Methods Enzymol.</i> 65:610-620 (1980).	
		OCKENHOUSE, et al., Activation of Monocytes and Platelets by Monoclonal Antibodies or Malaria-infected Erythocytes Binding to the CD36 Surface Receptor in vitro," <i>J. Clin. Invest.</i> 84:468-475 (1989).	
		OFFENSPERGER, et. al., "In vivo inhibition of duck hepatitis B virus replication and gene expression by phosphorothioate modified antisense oligodeoxynucleotides," <i>EMBO J.</i> 12:1257-1262 (1993).	
		OQUENDO, et al., "CD36 Directly Mediates Cytoadherence of Plasmodium falciparium Parasitized Erythocites," Cell 58:95-101 (1989).	
		ORSON, et al., "Oligonucleotide inhibition of IL2Rα mRNA transcriptionby promoter region collinear triplex formation in lymphocytes," <i>Nucl. Acids Res.</i> 19:3435-3441 (1991).	
		OTTNAD, et al., "Differentiation of binding sites on reconstituted hepatic scavenger receptors using oxidized low-density lipoprotein," <i>Biochem J.</i> 281:745-751 (1992).	
		PEARSON, et al., "Expression cloning of dSR-CI, a class C macrophage-specific scavenger receptor from <i>Drosphila melanogaster</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 92:4056-4060 (1995).	
V		PENMAN, et al., The Type I and Type II Bovine Scavenger Receptors Expressed in Chinese Hamster Ovary Cells are Trimeric Proteins with Collagenous Triple Helical Domains Comprising Noncovalently Associated Monomers and Cys ⁸³ -Disulfide-linked Dimers," <i>J. Biol. Chem.</i> 266:23985-23993 (1991).	

Examiner's	222	Date Considered // . /
Signature		2/2/06
Signature		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	+
-----------------------------------------------	---

PT	O/SB/08A	(10-96
Approved for use through 10/31/99.	OMB 065	1-0031
atent and Trademark Office: U.S. DEPARTMENT	OF COMA	IERCE

Under the	Paperwork Reduction Act of 1995, no persons are required to respond t	o a collection of information unless it contains a va	lid OMB control number		
	Substitute for form 1449A/PTO	Complete if Known			
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Application Number	08/765,108		
	,	Filing Date	March 27, 1997		
		First Named Inventor	Monty Krieger		
1		Group Art Unit	1646		
İ		Examiner Name	JUIM, John D. BRAUNCUL		
Sheet	10 of 13	Attorney Docket Number	MIT 6620 CIP		

.		OTHER ART NON PATENT LITERATURE DOCUMENTS	
xaminer's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Τ-
May		PERRY, et al., "The Use of 3D Modeling Databases for Identifying Structure Activity Relationships," QSAR: Quantitative Structure-Activity Relationships in Drug Design pp. 189-193 (Alan R. Liss, Inc. 1989).	
		PITAS, et al., "Uptake of Chemically Modified Low Density Lipoproteins In Vivo Is Mediated by Specific Endothelial Cells," <i>J. Cell. Biol.</i> 100:103-117 (1985).	
		POSTEL, et al., "Evidence that a triplex-forming oligodeoxyribonucleotide binds to the c-myc promoter in HeLa cells, thereby reducing c-myc mRNA levels," Proc. Natl. Acad. Sci. USA 88: 8227-8231 (1991).	
		PREDESCU, et al., "Binding and Transcytosis of Glycoalbumin by the Microvascular Endothelium of the Nature Myocardium: Evidence that Glycoalbumin Behaves as a Bifunctional Ligand," J. Cell Biol. 107:1729-1738 (1988).	
1		RIGOTTI, et al., "The Class B Scavenger Receptors SR-BI and CD36 are Receptors for Anionic Phospholipids," <i>J. Biol. Chem.</i> 270:1-4 (1995).	
		RIGOTTI, et al., "The Class B Scavenger Receptors SR-BI and CD36 Are Receptors for Anionic Phospholipids," J. Biol. Chem. 270(27):16221-16224 (1995).	
W		RIPKA, "Computers picture the perfect drug," New Scientist 54-57 (June 16, 1988).	
	,	ROHRER, et al., "Coiled-coil fibrous domains mediate ligand binding by macrophage scavenger receptor type II," Nature 343:570-572 (1990).	
	,	ROUVINEN, et al., "Computer-aided Drug Design," Acta Pharmaceutica Fennica 97:159-166 (1988).	
1		SAMBROOK, Fritsch, and Maniatis. Molecular Cloning: A Laboratory Manual, Second Edition, Cold Spring Harbor, NY, Cold Spring Harbor Laboratory Press (1989) (Table of Contents only).	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

1

Signature

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	1
-----------------------------------------------	---

PTO/SB/08A (10-96
Approved for use through 10/31/99. OMB 0651-	0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMME	RCE

Substitute for form 1449A/PTO	Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Application Number	08/765,108		
, , ,	Filing Date	March 27, 1997		
	First Named Inventor	Monty Krieger		
	Group Art Unit	1646		
	Examiner Name	Ulm, John BRANNOCK		
pet 11 of 13	Attorney Docket Number	MIT 6620 CIP		

xaminer's	Cito	OTHER ART – NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	Ŧ
nitials*	Cite No. ¹	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	<u>'</u>
m		SARIN et al., "Inhibition of acquired immunodeficiency syndrome virus by oligodeoxynucleoside methylphosphonates," <i>Proc. Natl. Acad. Sci. USA</i> 85:7448-7451 (1989).	
7		SAVILL, et al., "Macrophage Vitronectin Receptor CD36 and Thrombospondin Cooperate in Recognition of Neutrophlis Undergoing Programmed Cell Death," Chest 99:6S-7S (suppl) (1991).	
		SCHAUB, et al., "Recombinant Human Macrophage Colony-Stimulating Factor Reduces Plasma Cholesterol and Carrageenee Granuloma Foam Cell Formation in Watanabe Heritable Hyperlipidemic Rabbits," Arterioscler. Thromb. 14(1):70-76 (1994).	
		SCHNITZER, et al., "Preferential Interaction of Albumin-binding Proteins, gp30 and gp18, with Conformationally Modified Albumins," <i>J. Biol. Chem.</i> 267:24544-24553 (1992).	
		SCRIVER, et al., Eds., in The Metabolic and Molecular Bases of Inherited Disease, Vol. 11, 7th Ed., pp. 2033; 2060-2061, New York, McGraw Hill.	
		SEGE, et al., "Characterization of a Family of Gamma-Ray-Induced CHO Mutants Demonstrates that the IdIA Locus is Diploid and Encodes the Low-Density Lipoprotein Receptor," <i>Mol. Cell. Biol.</i> 6:3268-3277 (1986).	
		SEGE, et al., "Expression and regulation of human low-density lipoprotein receptors in Chinese hamster ovary cells," Nature 307:742-745 (1984).	_
	-	SHAW, et al., "Modified deoxyoligonucleotides stable to exonuclease degradation in serum," <i>Nucleic Acids Res.</i> 19:747-750 (1991).	
		SPARROW, et al., "A Macrophage Receptor That Recognizes Oxidized Low Density Lipoprotein but Not Acetylated Low Density Lipoprotein," <i>J. Biol. Chem.</i> 264:2599-2604 (1989).	
1		STANTON, et al., "A Macrophage Fe Receptor for IgG Is Also a Receptor for Oxidized Low Density Lipoprotein," J. Biol. Chem. 267:22446-22451 (1992).	

		•				<u></u>	
Examiner's Signature	Mo	um	Date Considered	2/	15/0	9	
			(

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	T+
-----------------------------------------------	----

PTO/SB/08A (10-96
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO		Complete if Known			
INFORMATION D STATEMENT BY	APPLICANT	Application Number	08/765,108		
(111 11 1111)	,,	Filing Date	March 27, 1997		
		Class Manne of Inventor	Monty Krieger		
		First Named Inventor	Imortly Krieger		
		Group Art Unit	1646		

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Τ²
W		STEINBERG, et al., "BEYOND CHOLESTEROL: Modifications of Low-Density Lipoprotein That Increase Its Atherogenicity," N. Engl. J. Med. 320:915-924 (1989).	
V		STENT, G.S., et al., Molecular Genetics, pp. 213-219 (1971).	
		SWIDA, et al., "Glue protein genes in <i>Drosophilo virilis</i> : their organization, developmental control of transcription and specific of mRNA degradation," <i>Development</i> 108(2):289-280 (1990).	
M		SZOSTAK, "In Vitro Genetics," TIBS 19:89-93 (1992).	
		TANDON, et al., "Identification of Glycoprotein IV (CD36) as a Primary Receptor for Platelet-Collagen Adhesion," J. Biol. Chem. 264:7576-7583 (1989).	
		VANDEPOL, et al., "Clinical Applications of Recombinant Macrophage-Colony Stimulating Factor (rhM-CSF)," Biotech Therap. 2:231-239 (1991).	
		VEGA, et al., "Cloning Sequences and Expression of a cDNA Encoding Rat LIMP II, a Novel 74-kDa Lysosomal Membrane Protein Related to the Surface Adhesion Protein CD36," <i>J. Biol. Chem.</i> 266:16818-16824 (1991).	
	-	VIA, et al., "Identification and density dependent regulation of the AC-LDL Receptor in normal and transformed bovine aortic endothelial cells (BAEC)," <i>The FASEB J.</i> 6:A371, #2135 (1992).	
		VILLASCHI, et al., "Binding and Uptake of Native and Glycosylated Albumin-Gold Complexes in Perfused Rat Lungs," Microvasc. Res. 32:190-199 (1986).	
		WICKSTROM, et al., "Human promyelocytic leukemia HL-60 cell proliferation and <i>c-myc</i> protein expression are inhibited by an antisense pentadecadeoxynucleotide targeted against <i>c-myc</i> mRNA," <i>Proc. Natl. Acad. Sci. USA</i> 85:1028-1032 (1988).	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Examiner's Signature

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	•
-----------------------------------------------	---

PTO/SB/08A (10-96 Approved for use through 10/31/99. OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO			APTO	Co	omplete if Known
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	08/765,108		
		Filing Date	March 27, 1997		
				First Named Inventor	Monty Krieger
				Group Art Unit	1646
				Examiner Name	Ulm, John D. Brywoll,
Sheet	13	of	13	Attorney Docket Number	MIT 6620 CIP
\L			<u></u>		
			OTHER ART -	NON PATENT LITERATURE DOCUM	
Examiner's Initials*	Cite No. ¹		item (book, magazine, journa	(in CAPITAL LETTERS), title of the article I, serial, symposium, catalog, etc.), date, pa publisher, city and/or country where publish	age(s), volume-issue number(s),

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
W		YOUNG, et al., "Triple helix formation inhibits transcription elongation in vitro," Proc. Natl. Acad. Sci. USA 88:10023-10026 (1991).	
		ZAMECNIK, et al., "Inhibition of replication and expression of human T-cell lymphotropic virus type III in cultured cells by exogenous systhenic oligonucleotides complementary to viral RNA," <i>Proc. Natl. Acad. Sci.</i> 83:4143-4146 (1986).	
		ZAMECNIK, et al., "Inhibition of Rous sarcoma virus replication and cell transformation by a specific oligodeoxynucleotide," Proc. Natl. Acad. Sci. USA 75:280-284 (1978).	
V		ZHU, et al., "Systemic Gene Expression AFter Intravenous DNA Delivery into Adult Mice," Science 261:209-211 (1993).	
			1
	<u> </u>		1
	-		-

Examiner's Signature	Murn	Date Considered	15/	04

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.